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INVENTOR(S): Sangeetha Narasimhan   CONFIRMATION NO. 1711

SERIAL NO.: 09/726,966   GROUP ART UNIT: 2625

FILED: November 29, 2000   EXAMINER: Chan S. Park

TITLE: PRINT TONER DENSITY MODE/PRINT MEDIA DEFAULT LINK

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REQUEST FOR REINSTATEMENT OF APPEAL AND SUPPLEMENTARY APPEAL BRIEF

In response to the Appeal Brief, the Examiner has re--opened prosecution asserting new grounds of rejection in a non-final Action mailed June 13, 2007. In accordance with paragraph 2 of the Action, the Applicant/Appellant requests reinstatement of the appeal and, accordingly, files this Supplementary Appeal Brief.

1.   REAL PARTY IN INTEREST.

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holding, LLC.

2.   RELATED APPEALS AND INTERFERENCES.

There are no other appeals or interferences known to Appellant, Appellant's legal representative or the Assignee which will affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

3.   STATUS OF CLAIMS.

Claims 1-5 and 7-11 are pending. Claim 6 has been canceled. The rejection of Claims 1-5 and 8-11 is appealed. The rejection of Claim 7 is not appealed.

4.   STATUS OF AMENDMENTS.

No amendments were filed after the final action.

5.   SUMMARY OF CLAIMED SUBJECT MATTER.

The claimed subject matter relates to a printer controller automatically selecting one parameter setting (e.g., print media) based on a user selection of another parameter setting (e.g., toner density).

Claim 1, for example, is directed to a method for selecting a print job parameter that includes a printer controller ascertaining an operator-selected toner density setting and the printer controller automatically selecting a print media source based upon the operator-selected toner density setting. One example of the method of Claim 1 is illustrated in steps 11-12 in Fig. 1 and described in the Specification at page 4, lines 16-20 and page 5, lines 12-18.

Claim 4, for example, is directed to a method for selecting a print job parameter that includes a printer controller ascertaining an operator-selected print media source setting and the printer controller automatically selecting a toner density setting based upon the operator-selected print media source setting. One example of the method of Claim 4 is illustrated in steps 21-22 in Fig. 2 and described in the Specification at page 4, lines 20-24 and page 6, lines 1-6.

Claim 7, for example, is directed to a printer controller configured to automatically recognize a selection of one of a plurality of settings for a first print job parameter and, in response to recognizing the selection of the first print job parameter setting,

automatically select one of a plurality of settings for a second print job parameter. A printer controller thus configured is described in the Specification at page 4, lines 16-24.

6.   GROUNDS OF REJECTION TO BE REVIEWED.

1.   Claims 1-3, 8 and 10 stand rejected under Section 102 as being anticipated by Allen (6291829).

2.   Claims 4 and 9 stand rejected under Section 102 as being anticipated by Yoo (5809367).

3.   Claims 5 and 11 stand rejected under Section 103 as being obvious over Yoo in view of Noyes (6364452).

7.   ARGUMENT.

GROUND NO. 1

Claims 1-3, 8 and 10 stand rejected under Section 102 as being anticipated by Allen (6291829).

Claims 1-3, 8 and 10 stand rejected under Section 102(e) as being anticipated by Allen (6291829). To support the Section 102 rejection, Mantell must teach each and every claim limitation, it must be enabling, and it must describe the claimed subject matter sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention. *Helifix Ltd. v. Blok-Lok*, 208 F.3d 1339 (Fed. Cir. 2000); *In re Paulsen*, 30 F.3d 1475 (Fed. Cir. 1994); MPEP § 2131.

Claim 1 recites a printer controller ascertaining an operator-selected toner density setting and the printer controller automatically selecting a print media source based upon the operator-selected toner density setting. Claim 8 (depending from Claim 7) recites a printer controller configured to automatically recognize a selection of one of a plurality of settings for toner density and, in response to recognizing the selection, automatically select one of a plurality of settings for a source of print media.

Allen teaches identifying the paper or other "recording media" in a printer and the printer controller using the media identification to "control the recording process." See

e.g., Allen Abstract and column 3, lines 22-34. Allen also teaches that a "quality level" may also be used by the printer controller to control the recording process:

> Along with possibly a quality level (e.g., "draft," "normal," and "best") selected by the user, the type of recording medium thus determined is used in the raster image processing pipeline to render optimally the printed information and by the printer controller to control the recording process. Allen column 3, lines 28-34.

Allen does not teach that the printer controller automatically selects a print media source in general, and more specifically, that the printer controller automatically selects a print media source based on an operator-selected toner density setting. On the contrary, Allen teaches only that the print media determination is used by the printer controller during the print process "along with possibly a quality level... selected by the user." (The print media determination is made by the printer controller or by a host computer based on data obtained by the printer sensing the media in the printer.) The Examiner's assertion to the contrary is not correct.

The Examiner asserts at page 4 of the Action that Allen teaches a printer controller automatically selecting a print media source based on an operator-selected toner density setting at column 3, lines 22-34, column 4, lines 36-40 and column 8, lines 12-23. Each of these passages is quoted in full below.

> In one embodiment, an unprinted region of the recording medium is imaged and the sensor output is converted to digital form and processed to form a characteristic vector, or array of values. This vector is compared to previously stored reference vectors, each reference vector being characteristic of a different type of recording medium, to determine the recording medium type. Along with possibly a quality level (e.g., "draft," "normal," and "best") selected by the user, the type of recording medium thus determined is used in the raster image processing pipeline to render optimally the printed information and by the printer controller to control the recording process. Allen column 3, lines 22-34.

> * * *

> As described further below, in addition to discriminating on the basis of feature dimensions, different media may be distinguished by such properties as density of features, spatial frequency of features, total reflectivity, contrast range, and gray-scale histograms. Allen column 4, lines 36-40.

* * *

This and other printers typically operate in multiple, user-specified quality modes, termed, for example, "draft", "normal", and "best" modes. To optimize performance of an ink jet printer, properties such as ink drop volume, number of drops per pixel, printhead scan speed, number of printhead passes over the same area of the medium, and whether pigmented black or composite dye-based black (i.e., combination of cyan, magenta, and yellow dyes) is used, are customized to each recording medium and for each print quality mode. In a laser printer, typically, the media feed rate, exposure levels, toner charging, toner transfer voltage, and fuser temperature might be adjusted to optimize performance on different media. Allen column 8, lines 12-23.

So far as Applicant can tell, there is no teaching or even any suggestion in any of these passages that Allen's printer controller automatically selects a print media source in general, and more specifically, that his printer controller selects a print media source based on a toner density setting. If the Examiner's disagrees, he is respectfully requested to specifically point out and explain the language in Allen that supports his assertions. Absent such a showing, the rejections based on Allen should be withdrawn by the Examiner.

Claims 1 and 8 and of their respective dependent claims distinguish patentably over Allen.

GROUND NO. 2
Claims 4 and 9 stand rejected under Section 102 as being anticipated by Yoo (5809367).

Claims 4 and 9 were rejected under Section 102(b) as being anticipated by Yoo (5809367).

Claim 4 recites a printer controller ascertaining an operator-selected print media source setting and the printer controller automatically selecting a toner density setting based upon the operator-selected print media source setting. Claim 9 (depending from Claim 7) recites a printer controller configured to automatically recognize a selection of one of a plurality of settings for a source of print media and, in response to recognizing

the selection of the source of print media, to automatically select one of a plurality of settings for a toner density.

Yoo teaches automatically controlling transfer voltage based on the thickness of the print media. Yoo column 4, lines 31-44 and column 7, lines 1-6. Transfer voltage is one print parameter that affects toner density. Yoo controls the transfer voltage to maintain a desired toner density for a particular thickness print media. Yoo seeks to maintain the same toner density setting for all print media, as noted in the following passages, rather than adjusting toner density to different levels for different print media.

> Overhead transparencies, which are large in size and thickness have higher resistance than normal paper's resistance. Thus, when such transparencies are used as the recording media, higher voltages should be applied to them when compared to those applied to the normal paper in order to produce documents with high print quality. The printer commonly adjusts the optimum conditions of electrostatic printing process to normal paper printing, and where the toner images transferred to an overhead transparency, the density of the printed image decreases. Yoo column 4, lines 31-43.

> * * *

> Alternately, if the keyboard input for paper selection from the OPE 48 has been made, the image processing unit $.44 a transfer voltage according to the type of paper selected by the user at step 76. The paper selection key can be adjusted for the thickness (or weight) of paper such as thin, thick and normal paper. Yoo column 6, lines 41-46.

> * * *

> When the laser beam printer prints on special paper which is thinner or thicker than normal, the present invention adjusts the printer's transfer voltage and fusing temperature to be adequate for the type of paper, so that the best possible print quality is achieved. Yoo column 7, lines 1-6.

Yoo explicitly recognizes that "the density of the printed image decreases" on thicker print media if the transfer voltage for normal/thinner print media is used. Yoo teaches adjusting the transfer voltage to be "adequate for the type of paper, so that the best possible print quality is achieved." While Yoo may be interpreted as teaching the selection of a transfer voltage based on a user-selected print media setting, he does not

teach or suggest selecting a toner density setting based on the print media setting. On the contrary, in Yoo the toner density setting has already been selected -- it remains constant for all print media selections. Indeed, Yoo's process for maintaining the same toner density setting for all print media actually teaches away from the limitations of Claims 4 and 9 in which the toner density setting is selected based on the print media source setting.

Claims 4 and 9 distinguish patentably over Yoo.

GROUND NO. 3

Claims 5 and 11 stand rejected under Section 103 as being obvious over Yoo (5809367) in view of Noyes (6364452).

Claims 5 and 11 were rejected under Section 103 as being obvious over Yoo (5809367) in view of Noyes (6364452).

Claims 5 and 11 distinguish over the combination of Yoo and Noyes for the same reasons noted above four Claims 4 and 9.

Respectfully submitted,

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APPENDIX I -- CLAIMS INVOLVED IN THE APPEAL

1.   A method for selecting a print job parameter including the steps of:

a printer controller ascertaining an operator-selected toner density setting; and

the printer controller automatically selecting a print media source based upon the operator-selected toner density setting.

2.   The method of Claim 1 wherein:

the step of a printer controller ascertaining an operator-selected toner density setting comprises the printer controller ascertaining an operator-selected draft toner density setting; and

the step of the printer controller automatically selecting a print media source based upon the operator-selected toner density setting comprises the printer controller automatically selecting a draft media source based upon the operator-selected draft toner density setting.

3.   The method of Claim 1 wherein:

the step of a printer controller ascertaining an operator-selected toner density setting comprises the printer controller ascertaining an operator-selected standard toner density setting; and

the step of the printer controller automatically selecting a print media source based upon the operator-selected toner density setting comprises the printer controller automatically selecting a standard media source based upon the operator-selected standard toner density setting.

4.   A method for selecting a print job parameter including the steps of:

a printer controller ascertaining an operator-selected print media source setting; and

the printer controller automatically selecting a toner density setting based upon the operator-selected print media source setting.

5.   The method of Claim 4 wherein:

the step of a printer controller ascertaining an operator-selected print media source setting comprises the printer controller ascertaining an operator-selected draft print media source setting; and

the step of the printer controller automatically selecting a toner density setting based upon the operator-selected print media source setting comprises the printer controller automatically selecting a draft toner density setting based upon the operator-selected draft print media source setting.

6.(canceled)

7.(not appealed)   A printer controller configured to:

automatically recognize a selection of one of a plurality of settings for a first print job parameter; and

in response to recognizing the selection of the first print job parameter setting, automatically select one of a plurality of settings for a second print job parameter.

8.   The printer controller of Claim 7, wherein the first print job parameter comprises toner density and the second print job parameter comprises a source of print media.

9.   The printer controller of Claim 7, wherein the first print job parameter comprises a source of print media and the second print job parameter comprises a toner density.

10.   The printer controller of Claim 8, wherein the printer controller is configured to:

automatically recognize a selection of a draft toner density setting; and

in response to recognizing the selection of a draft toner density setting, automatically select a source of draft print media.

11.   The printer controller of Claim 9, wherein the printer controller is configured to:

automatically recognize a selection of a source of draft print media; and

in response to recognizing the selection of a source of draft print media, automatically select a draft toner density setting.

APPENDIX II -- EVIDENCE SUBMITTED UNDER RULES 130, 131 OR 132

APPENDIX III -- RELATED PROCEEDINGS